

Appl. No. 10/083,093

Response to Office action dated June 14, 2006

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Amendments to the Specification:

On page 23, please replace the paragraph at line 13, with the following amended paragraph.

Openings 60 preferably have a similar shape and geometry and are typically positioned in one quadrant of cup 50. Each opening 60 is adapted to receive any one of the insertion members described herein, such any one of a bone screw, a bone peg, a bone spike, or an opening cover. The following features of opening 60 are shown in Figure 4. In general, openings 60 have inner walls 62 with an upper portion 160 and a lower portion 162, with the upper portion 160 having an extended frustoconical taper section 64. There is a chamfer edge 164 where the upper portion 160 meets the first surface 54.

On page 24, please replace the paragraph at line 10, with the following amended paragraph.

Openings 60 also have a lower portion 162 that is shown as a smaller diameter section 66 at or near second surface 56. Although smaller diameter section 66 is shown as a curved edge, this shape is not critical to the invention. Section Smaller diameter section 66 may be any shape, such as a flat edge, a chamfered edge, a beveled surface, or as shown, a rounded or curved surface. It is merely preferred that smaller diameter section 66 have a smaller diameter than the diameter of taper section 64 at first surface 56. In particular embodiments, smaller diameter section 66 is curved or rounded to facilitate positioning of a non-locking

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screw or other member. In even more particular embodiments, if section 66 is rounded, it may be provided with a spherical or non-spherical surface. The lower portion 162 may end at second surface 56 in a cylindrical portion 166.

On page 25, please replace the paragraph at line 19 (and continuing on to page 26), with the following amended paragraph.

Openings 60 are also configured to also receive insertion members according to various embodiments of this invention. Specially adapted insertion members, such as sealing or locking screws, pegs, spikes, or opening covers, having a proprietary head configuration provided by this invention and described in detail below. One example is shown in Figure 6, where opening 60 is shown receiving an insertion member 90. Insertion member 90 is shown and described as a screw although it should be understood that other types of insertion members are considered within the scope of this invention. The insertion member head 92 contacts the tapered section 64 (or the upper portion) of opening and does not contact the smaller diameter section 66 (or the lower portion) of opening. Briefly, as shown in Figure 6, e Extended taper section 64 provides a recess that can receive head 92 of screw 90 when screw 90 is inserted through opening 60 at an angle, and still provide sufficient clearance between head 92 and first surface 54 such that locking of screw 90 at an angle will not cause screw head 92 to project past first surface 54 and into the concave interior of cup 50, causing generation of wear particles.